

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-25760; Directorate Identifier 2006-CE-48-AD; Amendment 39-14757; AD 2006-18-51]

RIN 2120-AA64

Airworthiness Directives; Raytheon Aircraft Company Models 1900, 1900C, and 1900D Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Raytheon Aircraft Company (RAC) Models 1900, 1900C, and 1900D airplanes. This AD contains the same information as emergency AD 2006-18-51 and publishes the action in the Federal Register. This AD requires you to do a one-time visual inspection of both the left and right wing rear spar lower caps for cracking and other damage such as loose or missing fasteners; repair any cracks or damage found; and report any cracks or damage found to the FAA and RAC. This AD results from extensive cracks found in the wing rear spar lower caps and rear spar web of two of the affected airplanes. One of the airplanes also had missing fasteners. We are issuing this AD to detect and correct cracking and other damage in the wing rear spar lower caps of the affected airplanes before the cracks or damage lead to failure. Such a wing failure could result in the wing separating from the airplane with consequent loss of control.

DATES: This AD becomes effective on September 8, 2006.

We must receive any comments on this AD by November 7, 2006.

ADDRESSES: Use one of the following addresses to comment on this AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.
- Fax: (202) 493-2251.

- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. To view the comments to this AD, go to <http://dms.dot.gov>. The docket number is FAA-2006-25760; Directorate Identifier 2006-CE-48-AD.

FOR FURTHER INFORMATION CONTACT: Steven E. Potter, FAA, 1801 Airport Road, Wichita, Kansas 67209; telephone: (316) 946-4124; fax: (316) 946-4107.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA received recent reports of cracks found in the wings of two RAC 1900D airplanes. During routine maintenance, the wing rear spar lower caps and rear spar web were found to have significant cracks.

The RAC Structural Inspection Manual requires a thorough inspection of the wing rear spar at 17,500 hours time-in-service (TIS) with repetitive inspections at intervals of 3,000 hours TIS.

One airplane had 19,126 hours TIS when cracks were found. The cracks were in the lower aft spar cap flange, but the cracks extended upward into the web and terminated at the lightening hole in the spar web. Fasteners were also found missing in the spar cap and wing cove splice plate. There were no discrepancies recorded from the initial inspection at 17,500 hours TIS on this airplane.

Early indications show similar cracking on the other airplane. We continue to gather information on this airplane.

Analysis shows that similar cracks could also develop in the wings of the Models 1900 and 1900C airplanes.

Cracking in the wing rear spar lower caps, if not corrected, could result in wing failure. Such a wing failure could result in the wing separating from the airplane with consequent loss of control.

On August 31, 2006, FAA issued emergency AD 2006-18-51 to require you to do a one-time visual inspection of both the left and right wing rear spar lower caps for cracking and other damage such as loose or missing fasteners; repair any cracks or damage found; and report any cracks or damage found to the FAA and RAC.

FAA's Determination

The FAA determined that immediate corrective action was required, that notice and opportunity for prior public comment were impracticable and contrary to the public interest, and that good cause existed to make the AD effective immediately by individual letters issued on August 31, 2006, to all known U.S. operators of the affected RAC Models 1900, 1900C, and 1900D airplanes. These conditions still exist, and the AD is published in the Federal Register as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and an opportunity for public comment. We invite you to send any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number "FAA-2006-25760; Directorate Identifier 2006-CE-48-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive concerning this AD.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket that contains the AD, the regulatory evaluation, any comments received, and other information on the Internet at <http://dms.dot.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located at the street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

U.S. Department
of Transportation
**Federal Aviation
Administration**



2006-18-51 Raytheon Aircraft Company (RAC): Amendment 39-14757; Docket No. FAA-2005-25760; Directorate Identifier 2006-CE-48-AD.

Effective Date

- (a) This AD becomes effective on September 8, 2006.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

Models	Serial Numbers
1) 1900	UA-3
2) 1900C (C-12J)	UB-1 through UB-74, UC-1 through UC-174, and UD-1 through UD-6
3) 1900D	UE-1 through UE-439

Unsafe Condition

(d) This AD is the result of extensive cracks found in the wing rear spar lower caps and rear spar web of two of the affected airplanes. One of the airplanes also had missing fasteners. We are issuing this AD to detect and correct cracking and other damage in the wing rear spar lower caps of the affected airplanes before the cracks or damage lead to failure. Such a wing failure could result in the wing separating from the airplane with consequent loss of control.

Compliance

- (e) To address this problem, you must do the following:

Actions	Compliance	Procedures
(1) A one-time visual inspection of both the left and right wing rear spar lower caps for cracks and other damage such as loose or missing fasteners.	At whichever occurs later after September 8, 2006 (the effective date of this AD), except to those who received emergency AD 2006-18-51, which contained the requirements of this amendment and became effective immediately upon receipt: (i) Within 24 hours; or (ii) Prior to further flight.	Follow the procedures in the Appendix to this AD.
(2) For the inspection in paragraph (e)(1) of this AD, you may return/position the airplane to a home base, hangar, maintenance facility, etc.	For this repositioning, you may operate the airplane up to 3 hours time-in-service provided the flight(s) occur(s) no later than 30 days after September 8, 2006 (the effective date of this AD), except to those who received emergency AD 2006-18-51, which contained the requirements of this amendment and became effective immediately upon receipt.	The following limitations are imposed for such a repositioning flight: (i) ONLY THE PILOT AND ANY ADDITIONAL FLIGHT CREW MEMBER REQUIRED FOR SAFE OPERATION IS ALLOWED FOR THIS FLIGHT; (ii) FLIGHT INTO KNOWN OR FORECAST MODERATE OR SEVERE TURBULENCE IS PROHIBITED; and (iii) INDICATED AIRSPEED IS LIMITED TO 175 KNOTS MAXIMUM.
(3) Repair any cracks or other damage such as loose or missing fasteners found during the inspection required in paragraph (e)(1) of this AD. Do this by obtaining and incorporating an FAA-approved repair scheme from RAC.	Before further flight after the inspection required by paragraph (e)(1) of this AD.	Contact RAC at Post Office Box 85, Wichita, Kansas 67201-0085; phone: 316-676-8366; fax: (316) 676-8745; email: tom_peay@rac.ray.com .

(4) Report the inspection results to the FAA and RAC. For the reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Within 72 hours after completing the inspection required in paragraph (e)(1) of this AD.

Send your report to Steven E. Potter, FAA, 1801 Airport Road, Wichita, Kansas 67209; fax: (316) 946-4107; email: steven.potter@faa.gov; and Tom Peay, Raytheon Aircraft Company, Post Office Box 85, Wichita, Kansas 67201-0085; fax: (316) 676-8745; email: tom_peay@rac.ray.com. Include in your report the following information:

- (i) aircraft model and serial number;
- (ii) number of cycles;
- (iii) aircraft hours TIS;
- (iv) left and right wing lower spar cap hours TIS;
- (v) hours TIS on the spar cap since last inspection;
- (vi) answer yes or no whether cracking, missing fasteners, or other damage was found; and
- (vii) if cracking was found, identify size and location of cracks.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Wichita Aircraft Certification Office, FAA, ATTN: Steven E. Potter, FAA, 1801 Airport Road, Wichita, Kansas 67209; telephone: (316) 946-4124; fax: (316) 946-4107, has the authority to approve AMOCs for this AD, if requested using the procedures in 14 CFR 39.

APPENDIX TO AD 2006-18-51

Inspection Instructions—Raytheon Aircraft Company 1900 Series Wing Rear Spar

Step 1. Lower the wing flaps to provide visual access to the wing rear spar cove area. Although the pictures show the flaps removed, this AD does not require flap removal to do the inspection.

Step 2. Using a strong, high-intensity light visually inspect the area of the wing rear spar identified in Figure 1. There is ample visually visual access from above the upper surface of the flap. Look for cracks (like those shown in Figures 2 and 3) and loose or missing fasteners.

Step 3. Clean the wing rear spar area 10 inches inboard and outboard of the buttock line (BL) 114 area.

Step 4. Repeat the Step 2 inspection.

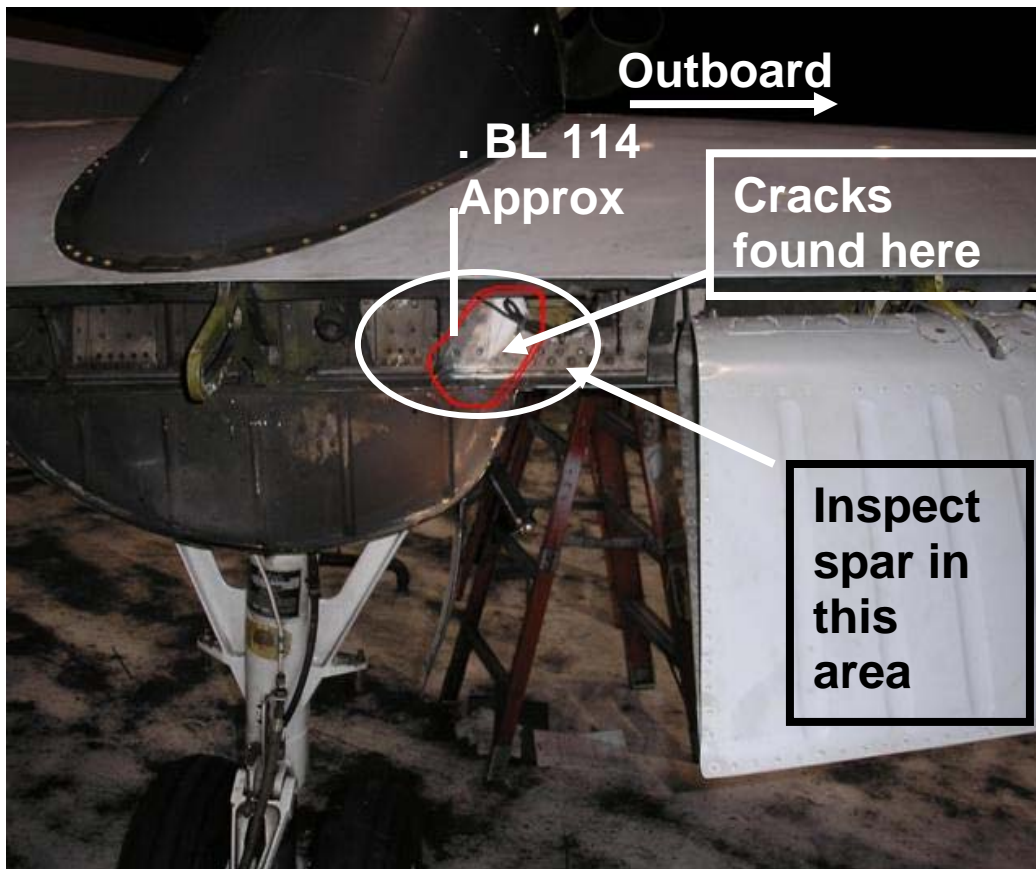


Figure 1: View of R/H wing rear spar at BL 114 area looking forward (The inboard flap is removed in this figure, but removal of the flap is not required to do the inspection).

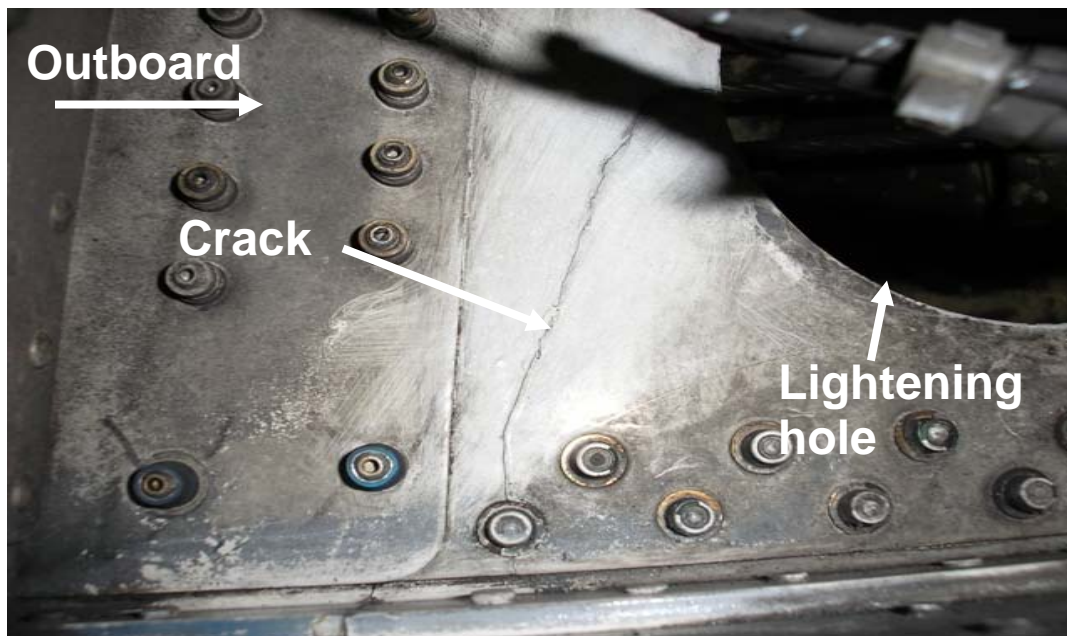


Figure 2: Closeup view of R/H wing rear spar web crack at BL 114 area looking forward (The inboard flap is removed in this figure, but removal of the flap is not required to do the inspection).

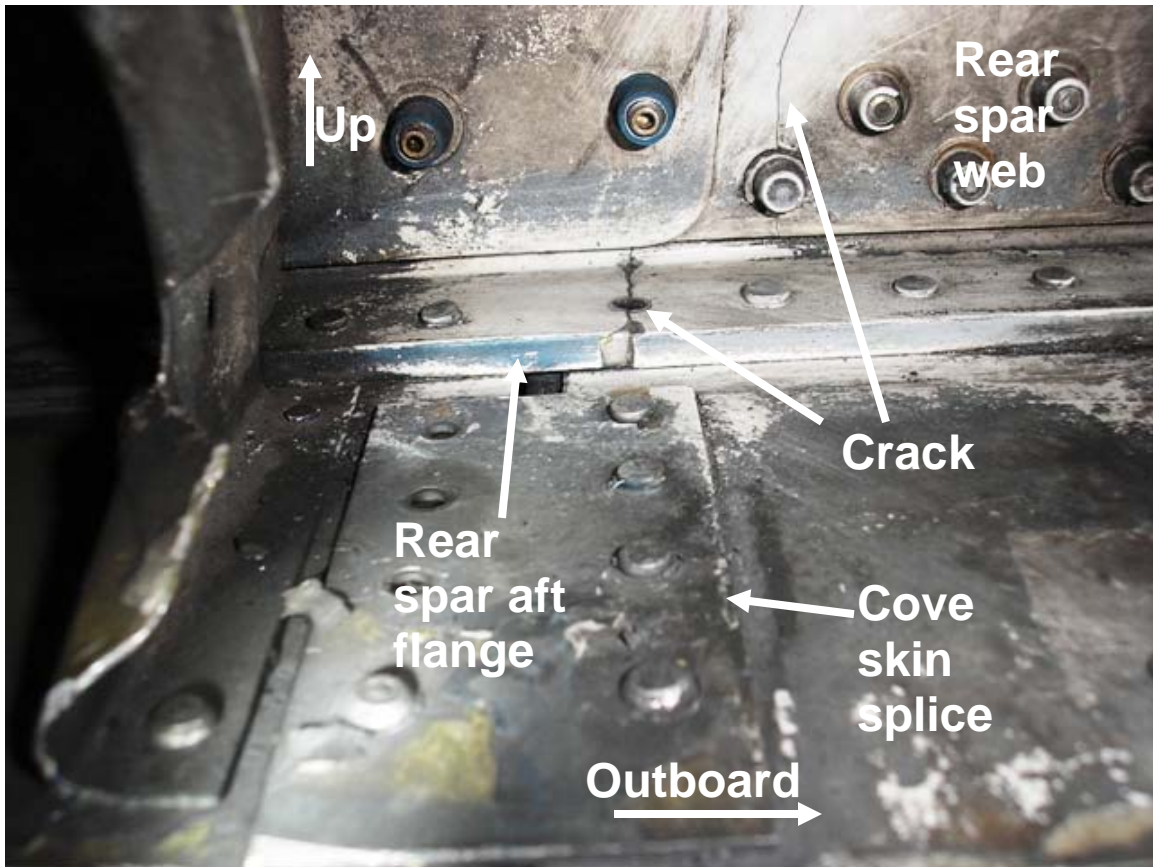


Figure 3: Closeup view of R/H wing rear spar cracks at BL 114 area looking forward (The inboard flap is removed in this figure, but removal of the flap is not required to do the inspection).

Issued in Kansas City, Missouri, on September 1, 2006.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 06-7511 Filed 9-7-06; 8:45 am]